European Scientific Journal October 2015 edition vol.11, No.28 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431

THE EFFECT OF GENERAL ELECTIONS ON STOCK RETURNS AT THE NAIROBI SECURITIES EXCHANGE

James Ndungu Kabiru
University of Nairobi, Department of Finance and Accounting
Duncan Elly Ochieng
Hellen Wairimu Kinyua
Lecturer University of Nairobi, Department of Finance and Accounting

Abstract

The performance of the financial markets is significantly impacted by the political environment during eneral ellections. This paper focussed on the effect of general ellections on the stock retuns at the Nairobi Securities exchange. Emperical results have given inconsistent results on whether general election events negatively of positively impact the stock return. The study adopted event study methodology and analysed secondary data collected from the NSE around the 1997, 2002, 2007 and 2013 general election dates in Kenya. The study found that market reaction to elections is highly negative or positive depending on the volatility of the election environment. Analysis of the cumulative abnormal returns (CAR) found that the 2002 and 2013 general elections were insignificant, while the CAR around the 1997 and 2007 general election events were found to be significant at 5% level of significance. The study, thus recommends that stock market, investors and other stakeholders not to overlook electioneering events, and to implement policies that will cusion the security market against political risks during general elections to enhance investor confidence.

Keywords: General Elections, Stock Returns, Nairobi Securities Exchange

Introduction

Background of the Study

Political risk is one of the crucial factors influencing the operation of a country's financial market. It can come in many forms such as a new piece of legislation, coup, an election, or a change in the country's regime. The performance of a stock market of an economy is of interest to various parties including investors, capital markets, the stock exchange and government

among others. Stock market performance is influenced by a number of factors key among them the activities of governments and the general performance of the economy. Economic activities do affect the performance of the stock markets. Other factors that affect markets performance include availability of other investment assets, change in composition of investors, and markets sentiments among other factors (Mendelson, 1976).

The relationship between politics and investor behaviour has been studied in numerous countries and in various contexts. Though, there is little consensus among previous studies and many of these have been concentrated on political events in a single country. Previous research suggests that the political uncertainty around elections creates economic uncertainty, which increases investors risk aversion. Though, the conclusions about how stock prices are affected by political events vary a lot depending on type of event and depending on the country investigated. How stock markets are influenced by various events and how abnormal returns occur are of great interest to both investors and researchers (Lehander and Lönnqvist, 2012).

Maning (1989) showed that British Telecom Shares, though not the market as a whole, reacted to opinion polls surrounding the 1987 General elections in the face of the impending nationalization. Niederhoffer, Gibbs and Bullock (1970), Peel and Pope (1993) and Gemmil (1992) examine the stock price behaviours during governmental and/or congressional elections in various developed countries, and they find some inefficiency in share prices around the time of elections, implying a profitable trading rule. They argue that changes in government administration caused by elections tend to affect financial policies or legislation, thereby significantly affecting stock prices.

General Elections and Stock Returns

The general election periods are recurring in nature and may affect both the political and investment environment of a given country. Campello, (2007) observed that upcoming general elections may create uncertainty which may affect investors' decisions and behavior. Changes in investment behavior are reflected from the activities at the Securities Exchange. Bear markets tend to occur at the end of the term year of the party in office while bull markets occur two or three years after elections.

Bialkowski, et al., (2008) posit that the implications of general elections for investors in stocks are tangible and important. Risk-averse agents require an adequate premium whenever they need to take on additional risks. They observed that typical investors are not fully diversified internationally, and it may occasionally happen that they find that all their wealth is invested in a country with upcoming elections. Therefore, the investigation into whether investors are appropriately compensated for bearing political risk associated with elections is crucial. It turns out that the

premium offered for the election risk is rather modest and acceptable only for investors with a relatively low degree of risk aversion.

The general elections in Kenya are guided by the constitution which provides for general elections to be held after every five years. For several decades following its independence, the Republic of Kenya was widely regarded as one of the most stable countries in an otherwise volatile region. But as has been observed this reputation began to change following the beginning of a transition to multi-party democracy in the early 1990s. Lusinde (2012) has argued that this situation will not change since a key element in Kenya's general elections is the role of personalities in elections.

The elections which gave rise to the first independence were held in May 1963, under the supervision of the colonial government. The 1969,1974,1979,1983 and 1988 general elections were held under single party system. The 1992, 1997, 2002, 2007 and 2013 general elections were held under multiparty system after the constitution was amended in 1991 to multiparty system in Kenya, (Common wealth, 2006).

Research Problem

The analysis of political cycles in stock market returns has been mostly conducted in the United States, and therein in the context of presidential elections. Part is generic to the extent that institutional rigidities in the political cycle-mandated terms in office for example impose structure upon market returns. Herbst and Slinkman (1984), examined the period from 1926-1977 and found a 48-month cycle during which returns were higher than average, peaking in November during presidential elections. Huang (1985) used data from 1932-1979 and discovered that stock returns were systematically higher in the last half of a political term than in the first, as did Hensel and Ziemba (1995), though with small and large caps. On this basis, Hensel and Ziemba (1995) suggested that political re-election campaigns create policies that stimulate the economy and are positive for stock returns.

The opportunistic Political Business Cycle (PBC) implies that policy-makers systematically aim for a rise in stock prices preceding elections (Vuchelen 2003), while the Uncertain Information Hypothesis (UIH) proposed by Brown et al. (1988, 1993) assumes that investors set prices before an event takes place. In responding to the increased uncertainty, investors set stock prices below their fundamental values. An upward corrective trend in security prices will then follow as the election result becomes more certain. As election-induced uncertainty is reduced, the risk-adjusted expected return should fall and stock prices should rise. However, Mehdian et al. (2008) noted that the greatest degree of uncertainty resolution and thus the highest observed returns should be expected in the time period

immediately preceding the election date as this is when media coverage and campaigning are at their peak.

The aim of this research proposal is to study the link between general elections and the Nairobi Securities Exchange performance. Kenya presents some interesting peculiarities that deserve special attention. Firstly, the whole issue of pending court cases at the International Criminal Court (ICC). Secondly, the post-election chaos that resulted from the 2007-2008 elections affected nearly all the sectors of the economy. In 2007, Foreign Direct Investment (FDI) was at $729m and dropped by almost 75% to $183m in 2008 after the election violence (KRA, Financial report 2009/2010).

Majority of the local studies reviewed analysed the effects of elections on firm's performance. The studies gave conflicting results. For instance, Menge, et al. (2013); Kithinji and Ngugi (2009) found positive relationship while Irungu (2012) found negative relationship. Further these studies analysed the entire market without looking at how the elections affect the different segments of firms listed at the NSE. This study seeks to answer the following research question.

Do the general elections in Kenya affect the market performance and is the effect the same in various segments at the NSE?

The main objecdtive of the study is to investigate whether there is a relationship between the general elections and the market performance at the Nairobi Securities Exchange.

Literature Review

A number of hypotheses have been advanced in the theoretical literature review to explain the relationship between information and stock market performance. This section will therefore review the relationship between information and the stock market performance based on existing theories and academic arguments.

Efficient Market Hypothesis

The Efficient Market Hypothesis (EMH), introduced by Markowitz in 1952 and subsequently named by Fama in 1970 assumes that financial markets incorporate all public information and asserts that share prices reflect all relevant information. Correct information is important in forming expectations and allowing investors to correctly process all available information, and where the discount rate is consistent with a normatively acceptable preference specification (Samuelson and Fama, 1965). The EMH's concept of informational efficiency has a Zen-like, counter-intuitive flavour to it. The more efficient the market, the more random the sequence of price changes generated by such a market, and the most efficient market of all is one in which price changes are completely random and unpredictable.

Modern Portfolio Theory

Modern portfolio theory by Markowitz explains how investors should select a portfolio and make the highest possible return from a certain level of risk or get the lowest possible risk for a certain level of return. There is a positive relationship between the risk and the expected return of a financial asset. When the risk of an asset increases, so does its expected return. What this means is that if an investor is taking on more risk, he is expected to be compensated for doing so with a higher return. Similarly, if the investor wants to boost the expected return of the investment, he needs to be prepared to take on more risk (Markowitz, 1952).

The Random Walk Hypothesis

The importance of the EMH stems primarily from its sharp empirical implications many of which have been tested over the years. Much of the EMH literature before LeRoy (1973) and Lucas (1978) revolved around the random walk hypothesis (RWH) and the martingale model, two statistical descriptions of unforecastable price changes that were initially taken to be implications of the EMH (Fama and Blume, 1966). One of the first tests of the RWH was developed by Cowles and Jones (1937), who compared the frequency of sequences and reversals in historical stock returns, where the former are pairs of consecutive returns with the same sign, and the latter are pairs of consecutive returns with opposite signs. French and Roll (1986) document a related phenomenon: stock return variances over weekends and exchange holidays are considerably lower than return variances over the same number of days when markets are open. This difference suggests that the very act of trading creates volatility, which may well be a symptom of Black's (1986) noise traders.

According to Jesen et al, (1996) stock market which is part of the financial markets perform among others the following functions in an economy, (i) raising capital for businesses: the stock exchange provides companies with the facility to raise capital for expansion through selling shares to investing public,(ii) Mobilizing savings for investment: when people draw their savings and invest in shares, it leads to a more rational allocation of resources i.e. by promoting business activity hence benefiting several sectors such as agriculture, commerce and industry resulting in a stronger economic growth and higher productivity levels (iii) Redistribution of wealth: by giving a wide spectrum of people a chance to buy shares and therefore become part owners of profitable enterprises, the stock market helps to reduce large income inequalities. Both casual and professional stock investors through stock price rise and dividends get a chance to share profits of promising businesses.

Booth and Booth (2003) further discovered that returns differed depending upon the political party which was in power. Their study, as are the majority of studies performed in this area, focussed on the US, and discovered fixed securities had significantly higher returns when the ruling party was republican, where small stock excess returns were higher under democratic administrations. Higher stock returns under democratic president in the (US) is suggested by Cahan et al., (2005) to be a surprising finding, and one that goes against conventional wisdom. As Nordhaus (1975) explained, one would assume a right wing government would be better for business, due to their conservative approach to managing economic cycles. Chan et al., (2005) refer to this apparent contradiction as the presidential puzzle, where real returns, particularly for small stock business, performed better under democratic leadership.

Hensel and Ziemba (1995) suggested this may be due to democratic governments enacting policies aimed at benefiting small business. However the differences they found between the returns of the two categories of stock were larger than one would expect. Booth and Booth (2003) found the presidential puzzle to benefit small cap stocks, with no significant difference between the returns of large cap stocks during the terms of both democratic and republican presidents.

Santa-Clara and Valkanov (2003) noted that large cap stocks do perform better under democratic presidents, although their performance is not great as that of their smaller counterparts. They found that large cap stocks tended to perform an average of 7% better, where small cap stocks produced returns of around 22%. Anderson et al (2008) noted that the US political system is much more complex than those in other parts of the world, as the ruling party may not be able to pass major laws or reforms if they do not control the senate.

Forester and Schmitz (1997) studied the effect US election cycles have on international returns and found some interesting observations around international stock returns. Their study showed that stock returns from eighteen Organization for Economic Cooperation and Development (OECD) countries between the years of 1957 and 1966 appeared to follow a pattern consistent with the US presidential cycle, thus indicating the effect of the political cycle may affect more than just the US economy. In their study of eighteen countries they were able to conclude that US presidential cycles are important when determining international stock market risk premiums.

Cahan et al., (2005) contrasts the findings of US studies to their own study of the Newzealand market and found stock returns to be higher under the right of centre national party. This is contrary to findings in the US where stock returns did vary under different governments. Stocks perform better under their left-of-centre democratic party. This finding is not exclusive to

Cahan et al., (2005), but was also discovered by Worthington (2006), and Anderson et al., (2008). Nordhaus (1975) and Anderson et al., (2008) argue that markets perform better under a right wing government. This is true in the cases of New Zealand and Australia, and is believed to be due to left wing governments introducing policies that boost employment, of which inflation is a natural consequence.

Niederhoffer et al. (1970) analyzed the stock market movements in the days and weeks surrounding US presidential elections, the study of the relationships between politics and the stock market has generated much research of interest. Thus, a great number of studies have analyzed several topics such as the influence of economic events on election voting; the relationship of the expected stock return with economic factors; the link between stock markets performance and political election dates, and the explanatory power of political risk in emerging and developed markets.

Recently, some studies have shown new empirical evidence that has boosted the interest for this type of financial literature. This is the case of the event study by Pantzalis et al. (2000) that examine stock market behavior around elections on an international scale (33 countries) and found that index abnormal returns are generally positive and significant in the 2 weeks prior to the election week. They noted that this abnormal return is strongest for elections with the highest degrees of uncertainty, in particular, in countries with low rankings of political, economic, and press freedom, and elections in which the incumbent loses. Bialkowski et al. (2008) investigated a sample of 27 OECD countries to test whether national elections induce higher stock market volatility. Their empirical findings indicate that investors are still surprised by the ultimate distribution of votes. Stock prices react strongly in response to this surprise and temporarily elevated levels of volatility are observed.

Vuchelen (2003) focused on the Belgian market and concludes that when a centre-left coalition takes office after an election, stock prices slightly increase, whereas a centre-right coalition would push stock prices down. Besides, a coalition made up of left-wing and right-wing parties (without any centre-parties) is said to be perceived as negative by investors. Leblang and Mukherjee (2005) constructed a model of speculative trading to show how government partisanship and trader's anticipation of electoral victory by the left-wing or the right-wing party affects the volume of trading and how this, in turn, affects the mean and volatility of stock prices in both the US and the British equity markets. Siokis and Kapopoulos (2007) find that different political regimes impact the conditional variances of the stock market index in Greece, reporting higher volatility increases in the pre-election period and when the right-wing party is in power.

Irungu (2012) investigated the informational content of general election results announcenment at the Nairobi securities exchange using events study methodology for the periods 1997 to 2007 and found that the average cumulative abnormal returns exhibited a reducing trend in the periods preceding announcement and a slower increase after announcement pointing to market absorption of the information in the long run period after the announcement.

A study by Menge, et al. (2014) on the effect of elections on stock market returns at the Nairobi securities exchange adopting events study methodology covering periods between 2002 and 2013 found that actual stock returns were significantly higher before elections than after election periods. The results led to the conclusion that the expected returns as well as the market returns were significantly higher before elections than after the elections. Their findings concur with the conclusions arrived at by Kithinji and Ngugi (2009). Empirical literature reviewed has concluded conflicting results as to the affect of elections on stock prices. This study will investigate whether there is a relationship between the general elections and the market performance and to further analyse if the effect is the same in various segments at the NSE.

Research Methodology

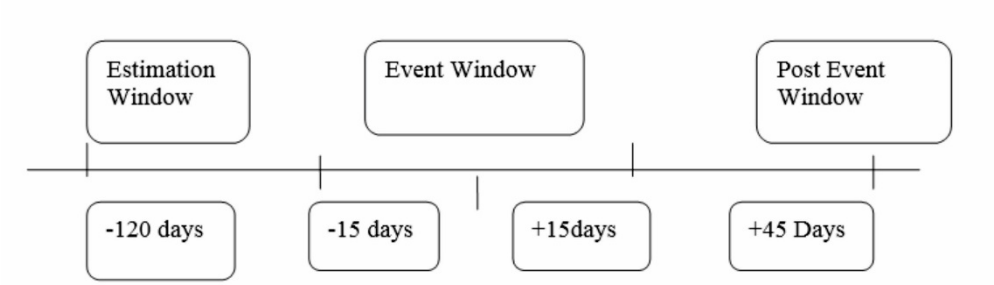
The study adopted an event study methodology. The basic concept is to find the abnormal return attributable to the event being studied by adjusting for the return that stems from the price fluctuation of the market as a whole (Gilson and Black, 1995). The study was based on a political variable (general elections) event study methodology to establish the behavior of the NSE performance around the sample period, 1997 to 2013. The collected secondary data was coded and entered into Statistical Package for Social Sciences (SPSS, Version 20.0) for analysis. The study used the following Market Model (MM) steps as outlined by (MacKinlay, 1997);

Step 1: Identification of the event of interest

The event of interest is the effect of general elections on the return of stocks quoted at the NSE. The dates of elections include 31st December 1997, 29th December, 2002, 30th December 2007 and 4th March 2013.

Step 2: Definition of the event window

The event window is taken to be 15 days before the election date and 15 days after the election day. The estimation window is 120 days before the event window and the post event window is 60 days after the event window.



Step 3: Selection of the sample set of firms included in the analysis

A sample of 20 firms in the NSE share index was used. Only those companies existing 120 days before election and 60 days after election dates were included. This implies that the figure of 20 has different companies at some points in time.

Step 4: Prediction of a "normal" return during the event window in the absence of the event

The study first computed the changes recorded in share prices to determine the actual return.

$$Actual\ Share\ return\ in\ day\ t, = \frac{(p_t - p_{t-1})}{p_{t-1}} * 100$$

Where;

P_t = Price of the security i at time t

P_{t-1}= Price of the security at time t-1

The changes in the NSE index for the same period were also computed. This was denoted as the market return.

$$NSE\ 20\ share\ \ Index\ Return\ in\ time\ t(Market\ Return) = \frac{(NSE_t - NSE_{t-1})}{NSE_{t-1}} * 100$$

The following market model was applied; $AR = \alpha + \beta X + e$

Where;

AR= actual returns

X = market return

β = market risk/partial correlation coefficient for market return and actual returns

α = constant

e = error term,

The normal or expected returns were generated from the following;

$$\hat{Y} = \alpha + \beta X$$

Where;

$\hat{Y} = \text{Expected Return}$

Step 5: Estimation of the "abnormal" return within the event window, where the abnormal return is defined as the difference between the actual and predicted returns, without the event occurring

The research applied the following model to get abnormal returns.

Abnormal Return = Actual Returns -Expected Returns

Step 6: Testing whether the abnormal return is statistically different from zero.

Test statistics was used to measure the statistical significance of the:

a) Cumulative Abnormal Returns (CAR) for each firm
b) Cumulative Abnormal Returns (CAR) for all firms
c) Cumulative Abnormal Returns (CAR) for all firms - across segments in the NSE.

Abnormal returns on the indices were computed using a mean-adjusted return approach as described by Brown and Warner (1985). Daily excess returns were measured by the mean-adjusted returns approach, that is, for each day and following the event, the abnormal or excess return from the stock index were calculated by the following equation.

$AR_t = R_t - R$

Where:

AR_t: Is the excess of the expected return for index at time *t*

R_t: Is the return on index at the time of event *t*

R: Is the average return on the index taken over the interval of 31 days in the estimation window.

Cumulative abnormal returns (CARs) were also analyzed over the interval of 31 days in the post-event window. The CAR corresponding to an event that was happening at time t (j=0) was computed as:

$CARt = \Sigma\ ARt$

Where:

CAR_t: Is the cumulative abnormal return at time *t*

AR_t: Is the abnormal return at time *t*

In contrast to event-day abnormal returns, which show the immediate investors' reaction on the political event (general election), the 30-day CARs provide an indication of the market response to the event 30 days following the general election.

Analysis of variances (ANOVA) was applied for scenario (a) where Cumulative Abnormal Returns (CAR) mean was compared across 4 electioneering periods to check whether some electioneering periods had more informational content compared to others. This approach differs significantly from Menge, et al. (2014) who analysed the CAR for all firms only. A t-test will be applied for Scenario (b) where mean Cumulative Abnormal Returns (CAR) for all firms were aggregated and means of the

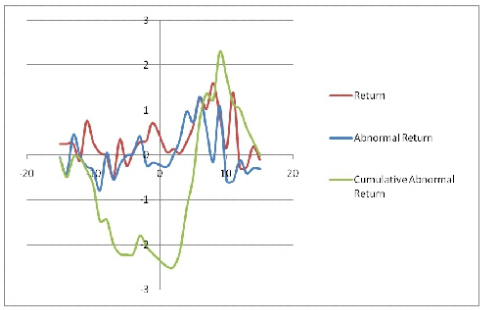
two periods, that is, before and after election date checked for significant differences.

Analysis of Variance was applied for scenario (c) where mean Cumulative Abnormal Returns (CAR) was compared across the various segments. This approach differed significantly from Menge, Mirie and Kimani (2014) who concentrated on scenario (b) only. The level of significance for the ANOVA and t-test was 5% (95 % confidence level). If the significance number found is less than the critical value (α) set at 0.05, then the conclusion is that the information content of general elections is significant. In other words, there exists significant difference in abnormal returns before and after the general elections. Otherwise the events study concludes that general elections do not influence stock returns.

Data Analysis And Intepretation

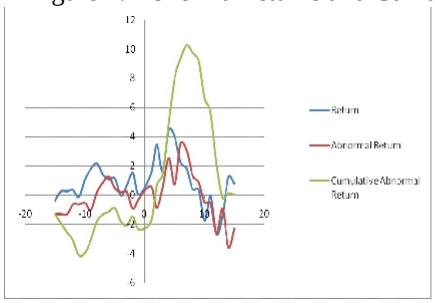
The objective of the study was to establish the effect of a political event specifically the general election on the returns at the Nairobi Securities Exchange (NSE). To achieve this objective, event study methodology was used for four general elections held in Kenya on 31st December 1997, 29th December, 2002, 30th December 2007 and 4th March 2013. The study analyzed the performance of the securities market before and after the general elections and found the following results.

Figure 1: 1997 General elections return, abnormal returns and Cumulative returns



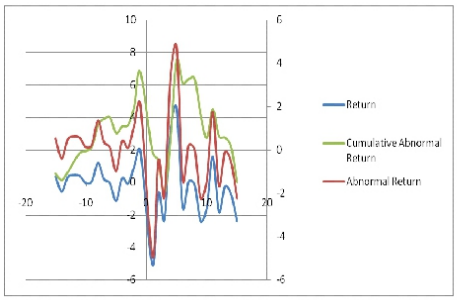
As presented in figure 4.4 above, the normal and the abnormal returns on average move in synchronicity during the event period. The Cumulative abnormal returns decline in the negative before the general election and steadily rises after the event.

Figure 2: Abnormal returns and Cumulative abnormal returns for 2002 general elections



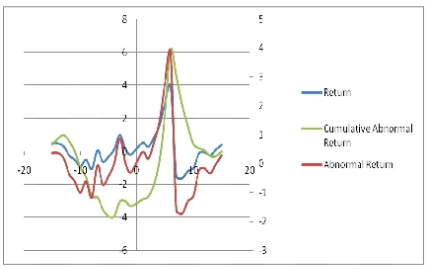
The cumulative abnormal returns remained negative throughout the pre- event (general election) period and rises after the event. The normal and abnormal returns on average move in tandem in the event period

Figure 3: Abnormal Returns (AR) and Cumulative Abnormal Returns (CAR) for 2007 general elections



In 2007 general elections, the cumulative abnormal return remained positive during the pre – event phase and dipped to the negative on the post event and reverted immediately to the positive and declined thereafter. The normal and abnormal returns moved in uniformity throughout the event period.

Figure 4: Abnormal Returns (AR) and Cumulative Anormal Returns (CAR) for 2013 general elections



For the 2013 general election, the normal and abnormal returns move in uniform throughout the event window. The cumulative abnormal returns gradually moved to the negative before the event (general election) and subsequently to the positive after the event and

The t-statistic test shows that for all the four general elections (100%) namely the 1997, 2002, 2007 and 2013, abnormal returns were statistically insignificant. The Cumulative abnormal returns for the 1997 and 2007 general elections were found to be statistically significant while the cumulative abnormal returns for the 2002 and 2013 general elections were established to be statistically insignificant at 5% level of significance. These are represented in the figures below.

Table 4.5: Descriptive Statistics for Abnormal Returns

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
AR 1997	30	.0000000	.51479428	.09398815
AR 2002	30	.0000000	1.51935929	.27739579
AR 2007	30	.0000000	1.80390395	.32934629
AR 2013	30	.0000000	1.16988689	.21359115

The descriptive statistics for the variables have been provided as the number of observations (N), the mean and the standard deviation for the 1997, 2002, 2007 and 2013 general elections abnormal returns (AR). The standard error is the estimated deviation of the mean of the sample used for the statistical test. For the 1997 general election abnormal returns (AR), the standard error of the sample mean is merely 0.093 which is relatively small. Therefore, there is a high likelihood that the sample mean is close to the population mean. The standard error of the sample mean for the 2002 general election abnormal returns (AR) is 0.277 which is relatively small meaning that it too adequately represents the population mean. Similarly, the standard errors for 2007 and 2013 general elections abnormal returns are 0.329 and 0.214 respectively which are relatively small meaning that they too adequately represents the population mean.

T – test on Abnormal Returns

One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
AR 1997	.000	29	1.000	.00000000	-.1922273	.1922273
AR 2002	.000	29	1.000	.00000000	-.5673381	.5673381
AR 2007	.000	29	1.000	.00000000	-.6735888	.6735888
AR 2013	.000	29	1.000	.00000000	-.4368429	.4368429

This output gives the t-test value, the degrees of freedom and the two-tailed significance. Since the p values for 1997, 2002, 2007 and 2013 abnormal returns are all 1.000 which are more than 0.05, the null hypothesis cannot be rejected. The t-statistical test at 5% level of significance indicates that event - day abnormal returns (AR) were insignificant for the general elections.

Table 4.7: Descriptive Statistics for Cumulative Abnormal Returns

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
CAR 1997	30	-.5807411	1.43411591	.26183254
CAR 2002	30	1.1008060	4.53934033	.82876636
CAR 2007	30	3.0701212	2.11975709	.38701293
CAR 2013	30	-.5648116	2.49004039	.45461710

For the 1997 general election cumulative abnormal returns (CAR), the standard error of the sample mean was 0.261, for the 2007 general election cumulative abnormal returns (CAR), the standard error of the

sample mean is merely 0.387 which is relatively small, for the 2013 general election cumulative abnormal returns (CAR), the standard error of the sample mean is merely 0.455. For these years (1997, 2007 and 2013), there is a high likelihood that the sample mean is close to the population mean. The standard error of the sample mean for the 2002 general election cumulative abnormal returns (CAR) is 0.828 which indicates that it is not adequately representative of the population mean.

Table 4.8: T – test for Cumulative Abnormal Returns

One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
CAR 1997	-2.218	29	.035	-.58074115	-1.1162488	-.0452335
CAR 2002	1.328	29	.194	1.10080601	-.5942115	2.7958235
CAR 2007	7.933	29	.000	3.07012117	2.2785909	3.8616515
CAR 2013	-1.242	29	.224	-.56481160	-1.4946080	.3649848

Interpretation of the Findings

The t test values for the 1997, 2002, 2007 and 2013 general elections cumulative abnormal returns (CAR) are calculated as -2.218, 1.328, 7.933 and -1.242 respectively. Since the p values for 1997 and 2007 cumulative abnormal returns are 0.035 and 0.000 respectively which are less than 0.05, the null hypothesis is rejected. However, for 2002 and 2013 cumulative abnormal returns (CAR), the p values of 0.194 and 0.224 respectively are greater than 0.05 and therefore, the null hypothesis cannot be rejected.

As per the t-statistical test for the cumulative abnormal returns (CAR), the 2002 and 2013 general elections were found to be insignificant while the 1997 and 2007 general elections were found to be significant at 5% level of significance. This means that the NSE 20 share index as well as the individual stock returns for the 1997 and 2007 general elections deviated significantly from their means while those for the 2002 and 2013 elections showed no significant deviation from their means.

This finding may imply that Nairobi stock exchange market viewed the 2002 and 2013 general election events as inconsequential and hence rebounded and stabilized immediately, hence the insignificance of cumulative abnormal returns (CAR) of the 2002 and 2013 general elections. The findings suggest that the NSE 20 share index as well as the individual stock returns for the 1997 and 2007 general elections deviated significantly from their means while those for the 2002 and 2013 elections showed no significant deviation from their means.

Summary, Conclusions And Recommendations

The study finds that the NSE 20 share index has exhibited seasonality over the months from the year 1997 to 2013. The returns are exhibiting seasonality and volatility over the periods. For all the four events (general elections), in two events (50%) the normal and the abnormal returns move in uniformity while in other two events (50%), the normal and the abnormal returns have the same trend as they move in synchronicity. For three of the events (75%), the pre-election days have negative cumulative abnormal returns which turn to positive after the election. For one election, Year 2007 election, the cumulative abnormal returns are positive before the election and turns negative briefly after the election after which the returns swing to positive and declines in the remainder of the period.

The t-statistic test shows that for all the four general elections (100%) namely the 1997, 2002, 2007 and 2013, abnormal returns were statistically insignificant. The Cumulative abnormal returns for the 1997 and 2007 general elections were found to be statistically significant while the cumulative abnormal returns for the 2002 and 2013 general elections were established to be statistically insignificant at 5% level of significance. This finding may imply that Nairobi stock exchange market viewed the 2002 and 2013 general election events as inconsequential and hence rebounded and stabilized immediately, hence the insignificance of cumulative abnormal returns (CAR) of the 2002 and 2013 general elections. The findings suggest that the NSE 20 share index as well as the individual stock returns for the 1997 and 2007 general elections deviated significantly from their means while those for the 2002 and 2013 elections showed no significant deviation from their means.

From the findings, it is concluded that market reaction to elections is highly negative or positive depending on the election at hand and hence the information made by general election is useful for valuing the securities in the markets. For example, in the 2007 general elections, the abnoral return declined to -4.936 on the first day of trading after the election. It can thus be observed that election affects the performance of the stock market and hence shareholders and other stakeholders should not overlook electioneering events. The cumulative abnormal returns exhibited a reducing trend in the periods preceding announcement and a sharp increase after announcement pointing to market absorption of the information in the long run period after the announcement. The two election periods indicate that the elections did not affect the investor confidence.

Recommendations

Due to reforms in the election process in Kenya, the 2013 general election was credited as peaceful and as such the abnormal returns one

trading day after the election rose from -0.290 to 0.408 which is a pointer to improved investor confidence that may be explained by constitutional provisions for adressing election disputes. The government should therefore ensure that all the election provisions in the new constitution are implemented and adhered to. The government through the Capital Markets Authority should enact policies aimed at cushioning the market from political interferences. The policies should be aimed at encouraging more local investors into the securities Exchange.

Limitations of the Study

The market performance during the elections may have been affected by other market anomalies such as the weekend effect, Monday effect, holiday effect. Three of the event periods that were analysed took place during the festive december holidays. Factors such as cash flows, growth opportunities, liquidity and dividend payouts were not considered when estimating the returns. They however affect market returns of firms. These factors were not isolated during the research and hence could have moderated the results of this study. Macroeconomic performance such as inflation, shilling depreciation and global financial crisis might have also moderated the effect of these events (general election). Unfortunately, these moderating factors could not be isolated in the study owing to difficulty in doing so.

Recommendations for Further Research

In addition to event study methodology, it is suggested that other approaches be adopted such as the filtered GARCH-EVT approach and the non-parametric methodology for use in the study of the effect of general election on the stock market performance. GARCH-EVT approach enables one to study the event-day effect only, though it is computationally intensive.

Further studies could be done to analyze the performance of stock returns in non election periods to compare their performance with the periods prior to elections as it is in this study. Researchers should study the effect of terrorism events that are normally followed by travel advisories that tend to reduce inflow of foreign exchange from sectors such as tourism. It could be interesting to conduct similar studies on other neighbouring countries to see if their presidential and parliamentary elections in general cause negative abnormal returns, or if one can find a different relationship in other parts of the world.

References:

Alesina, A. (1987). Macroeconomic policy in a two-party system as a repeated game. *The Quarterly Journal of Economics*, 651-678.

Anderson, H. D., Malone, C. B., & Marshall, B. R. (2008). Investment returns under right-and left-wing governments in Australasia. *Pacific-Basin Finance Journal*, *16*(3), 252-267.
Białkowski, J., Gottschalk, K., & Wisniewski, T. P. (2008). Stock market volatility around national elections. *Journal of Banking & Finance*, *32*(9), 1941-1953.
Black, F. (1988). An equilibrium model of the crash. In *NBER Macroeconomics Annual 1988, Volume 3* (pp. 269-276). MIT Press.
Booth, J. R., & Booth, L. C. (2003). Is presidential cycle in security returns merely a reflection of business conditions?. *Review of Financial Economics*, *12*(2), 131-159.
Brown, K. C., & Harlow, W. V. (1988). Market overreaction: magnitude and intensity. *Journal of Portfolio Management*, *14*(2), 6-13.
Brown, S. J., & Warner, J. B. (1985). Using daily stock returns: The case of event studies. *Journal of financial economics*, *14*(1), 3-31.
Cahan, J., Malone, C. B., Powell, J. G., & Choti, U. W. (2005). Stock market political cycles in a small, two-party democracy. *Applied Economics Letters*, *12*(12), 735-740.
Campbell, J. Y., & Shiller, R. J. (1989). The dividend-price ratio and expectations of future dividends and discount factors. *Review of financial studies*, *1*(3), 195-228.
Campello, D. (2007). Do markets vote? A systematic analysis of portfolio investors' response to national elections. *Department of Political Science, University of California, Los Angeles*.
Chan, Y. C., & John Wei, K. C. (1996). Political risk and stock price volatility: the case of Hong Kong. *Pacific-Basin Finance Journal*, *4*(2), 259-275.
Commonwealth, (2006). The Report of the 2002 Kenya General Election Commonwealth Observer Group.
Cooper, D. R., & Schindler, P. S. (2010). Business research methods.
Fabozzi, F. (1995). Capital Market Institutions and Instruments. New Jersey: Prentice Hall, Inc.
Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *The journal of Finance*, *25*(2), 383-417.
Fama, E., & French, K. (1988). Permanent and temporary components of stock prices. *The Journal of Political Economy*, 96(2), 246-273.
Ferri, M. (2008). The response of US equity values to the 2004 presidential election. *Journal of Applied Science*, *18*(1), 29-38.
Fischer, D. E., & Jordan, R. J. (1995). *Security analysis and portfolio management*. Englewood cliffs: Prentice Hall.

Forester, S. & Schmitz, F. (1997). The transmission of U.S. election cycles to international stock returns. *Journal of International Business Studies*, *28*(1), 1-27.

Gemmill, G. (1992). Political risk and market efficiency: tests based in British stock and options markets in the 1987 election. *Journal of Banking & Finance*, *16*(1), 211-231.

Gilson, R. J. & Black, B. S. (1995). The Law and Finance of Corporate Acquisitions.

Hensel, C. R., & Ziemba, W. T. (1995). United States investment returns during Democratic and Republican administrations, 1928-1993. *Financial Analysts Journal*, 61-69.

Herbst, A. F., & Slinkman, C. W. (1984). Political-economic cycles in the US stock market. *Financial Analysts Journal*, 38-44.

Huang, R. D. (1985). Common stock returns and presidential elections. *Financial Analysts Journal*, 58-61.

http://www.nse.co.ke Nairobi Stock Exchange Website.

Irungu, A. K. (2012). Informational content of general election results announcenment at the nairobi securities exchange. *Unpublished MBA project*, University of Nairobi.

Jacobsen, B. (1999). Irrational trading in a financial market. *Available at SSRN 150629*.

Jesen, G.R., Mercer, J.M. & Johnson, R.R. (1996). Business conditions, Monetary Policy, and Expected Security Returns. *Journal of financial Economics 40*: 213-237.

Kenya Revenue Authority. Financial Report, 2009/2010.

Kithinji, A. & Ngugi, W. (2009). Stock Market Performance before and after General Elections – A Case Study of the Nairobi Stock Exchange.

Korteweg. A., (2009). The Net Benefits to Leverage. *Journal of Finance*, 75(1),1-43.

Leblang, David & Bumba Mukherjee. (2005). Government partisanship, elections, and the stock market: examining American and British stock returns, 1930-2000. *American Journal of Political Science* 49(4), 780-802.

Lee, R. (1998). What Is An Exchange? The Automation, Management, and Regulation of Financial Markets. New York: Oxford University Press Inc.

LeRoy, S.F. and Porter, R (1981). The Present Value Relation: Tests Based on Variance Bounds, *Econometrica* 49 (19), 555-577.

Lusinde, M. M. (2012). *Volatility in stock returns of NSE listed companies around general elections in Kenya*. Unpublished MBA project, University of Nairobi

MacKinlay, A. C. (1997). Event studies in economics and finance. *Journal of economic literature*, 13-39.

Markowitz, H. (1952). Portfolio selection. *The journal of finance*, *7*(1), 77-91.
Marshall, C. & Rossman, G.B. (2006) Designing qualitative research (4th. Ed).London: Sage.
Mc Callum, B. (1978). The political business cycle: An empirical test. *Southern Economic Journal*, *44*(3), 504-515.
Mehdian, S., Nas, T., & Perry, M. J. (2008). An examination of investor reaction to unexpected political and economic events in Turkey. *Global Finance Journal*, *18*(3), 337-350.
Mendelson, M. (1976). Investment Analysis and Security Markets.
Menge, R.N, Mwangi, M. & Kimani, J.G. (2014) Effect of elections on stock market returns at the Nairobi securities exchange. *Prime Journal of Social Science 3*(6), 763-768.
Mishkin, Frederic S. & Eugene,W. N. (2002). *U.S. Stock Market Crashes and their Aftermath*: Implications for Monetary Policy. National Bureau of Economic Research, Working Paper Series 8992, 1-10.
Muga, D.N. (1974) The Nairobi Stock Exchange; it's History, Organization and Role in the Kenyan Economy. Unpublished MBA Dissertation University of Nairobi.
Mugenda, O. M., & Mugenda, A. G. (2003). Research methods. Quantitative and qualitative approaches. Nairobi. Acts Press.
Niederhoffer, V., Gibbs, S., & Bullock, J. (1970). Presidential elections and the stock market. *Financial Analysts Journal*, 111-113.
Nofsinger, J.R., 2004. The stock market and political cycles. Paper presented at the Annual Meeting of the Financial Management Association, October 6-9, 2004, New Orleans, LA.
Nordhaus. W. (1975). The political business cycle. The review of economic studies, 42(2), 169-190
Ofek, E., & Richardson, M. (2003). Dotcom mania: The rise and fall of internet stock prices. *The Journal of Finance*, *58*(3), 1113-1138.
Olowoniyi, A. O & Ojenike, J.O, (2012), Determinants of Stock Return of Nigerian-Listed Firms, *Journal of Finance*, June 2012.
Pantzalis, C., Stangeland, D. A., & Turtle, H. J. (2000). Political elections and the resolution of uncertainty: the international evidence. *Journal of banking & finance*, *24*(10), 1575-1604.
Peel, D. & Pope, P. (1983). General Election in the U.K. in the Post-1950 Period and the Behavior of the Stock Market, Investment Analysis 67, 4-10.
Santa-Clara, P., & Valkanov, R. (2003). The presidential puzzle: political cycles and the stock market. *The Journal of Finance*, *58*(5), 1841-1872.
Shiller, R. J. (1981). The Use of Volatility Measures in Assessing Market Efficiency. *The Journal of Finance*, *36*(2), 291-304.

Shleifer, A & Vishny, R.W., (2000), Agency problems and dividend policies around the world, *Journal of Finance*, *55*(1), 1-33.
Siokis, & Kapopoulos, (2007). Parties, Elections and Stock Market Volatility: Evidence from a Small Open Economy.
Sunde, T. & Sanderson A. (2009). A review of the determinants of share prices. *Journal of Social Sciences 5*(3), 188-192.
Vuchelen, J. (2003). Electoral systems and the effects of political events on the stock market: The Belgian case. *Economics & Politics*, *15*(1), 85-102.
Worthington, A. (2006). Political cycles and risk and return in the Australian stock market, Menzies to Howard (working paper). School of accounting and finance, university of Wollongong.

Appendices

Appendix 1: Listed Firms At Nairobi Securities Exchange

AGRICULTURAL
Eaagads Ltd
Kapchorua Tea Co. Ltd
Kakuzi Ltd
Limuru Tea Co. Ltd
Rea Vipingo Plantations Ltd
Sasini Ltd
Williamson Tea Kenya Ltd
COMMERCIAL AND SERVICES
Express Ltd
Kenya Airways Ltd
Nation Media Group
Standard Group Ltd
TPS Eastern Africa (Serena) Ltd
Scangroup Ltd
Uchumi Supermarket Ltd
Hutchings Biemer Ltd

Longhorn Kenya Ltd
TELECOMMUNICATION AND TECHNOLOGY
Safaricom Ltd
AUTOMOBILES AND ACCESSORIES
Car and General (K) Ltd
CMC Holdings Ltd
Sameer Africa Ltd
Marshalls (E.A.) Ltd
BANKING
Barclays Bank Ltd
CFC Stanbic Holdings Ltd
I&M Holdings Ltd
Diamond Trust Bank Kenya Ltd
Housing Finance Co Ltd
Kenya Commercial Bank Ltd
National Bank of Kenya Ltd
NIC Bank Ltd
Standard Chartered Bank Ltd
Equity Bank Ltd
The Co-operative Bank of Kenya Ltd
INSURANCE
Jubilee Holdings Ltd
Pan Africa Insurance Holdings Ltd
Kenya Re-Insurance Corporation Ltd
Liberty Kenya Holdings Ltd

British-American Investments Company (Kenya) Ltd
CIC Insurance Group Ltd
INVESTMENT
Olympia Capital Holdings ltd
Centum Investment Co Ltd
Trans-Century Ltd
MANUFACTURING AND ALLIED
B.O.C Kenya Ltd
British American Tobacco Kenya Ltd
Carbacid Investments Ltd
East African Breweries Ltd
Mumias Sugar Co. Ltd
Unga Group Ltd
Eveready East Africa Ltd
Kenya Orchards Ltd
A. Baumann CO Ltd

CONSTRUCTION AND ALLIED
Athi River Mining Ltd
Bamburi Cement Ltd
Crown Berger Ltd
E.A.Cables Ltd
E.A.Portland Cement Ltd
ENERGY AND PETROLEUM
KenolKobil Ltd

Total Kenya Ltd
KenGen Ltd
Kenya Power & Lighting Co Ltd
Umeme Ltd
GROWTH ENTERPRISE MARKET SEGMENT
Home Afrika Ltd

Appendix II

Table 1: 1997 Abnormal returns and Cumulative abnormal returns

Days	Share Index	Return	Abnormal return	Cumulative Abnormal return
-15	3049.11	0.25152	-0.0608	-0.0608
-14	3045.50	-0.1184	-0.4308	-0.4916
-13	3068.72	0.76244	0.45008	-0.0415
-12	3077.50	0.28611	-0.0262	-0.0678
-11	3078.97	0.04777	-0.2646	-0.3323
-10	3077.97	-0.0325	-0.3448	-0.6772
-9	3063.05	-0.4847	-0.7971	-1.4743
-8	3073.97	0.35651	0.04415	-1.4301
-7	3066.67	-0.2375	-0.5498	-1.98
-6	3069.46	0.09098	-0.2214	-2.2013
-5	3078.42	0.29191	-0.0205	-2.2218
-4	3088.69	0.33361	0.02125	-2.2005
-3	3110.85	0.71746	0.4051	-1.7954
-2	3113.12	0.07297	-0.2394	-2.0348
-1	3117.47	0.13973	-0.1726	-2.2075
1	3118.78	0.0419	-0.2705	-2.4779
2	3128.01	0.29613	-0.0162	-2.4941
3	3148.45	0.65341	0.34105	-2.1531
4	3188.54	1.27335	0.96099	-1.1921
5	3221.56	1.03539	0.72303	-0.4691
6	3273.16	1.60198	1.28962	0.82055
7	3301.67	0.8709	0.55854	1.37909
8	3307.07	0.16356	-0.1488	1.23029
9	3353.26	1.39684	1.08448	2.31477
10	3344.21	-0.27	-0.5823	1.73243
11	3335.18	-0.27	-0.5824	1.15003
12	3341.56	0.19114	-0.1212	1.02881
13	3338.09	-0.1036	-0.416	0.61283
14	3338.49	0.01189	-0.3005	0.31236
15	3338.49	0	-0.3124	0
Average return		0.31236		

Table 2: Abnormal returns and Cumulative abnormal returns

Days	Share Index	Return	Abnormal return	Cumulative Abnormal return
-15	1156.59	-0.39014	-1.30059	-1.30059
-14	1159.71	0.269759	-0.64069	-1.94128
-13	1162.93	0.277656	-0.63279	-2.57407
-12	1167.18	0.365456	-0.54499	-3.11906
-11	1165.92	-0.10795	-1.0184	-4.13746
-10	1178.7	1.09613	0.185682	-3.95178
-9	1199.87	1.796046	0.885599	-3.06618
-8	1225.95	2.173569	1.263121	-1.80306
-7	1242.98	1.389127	0.478679	-1.32438
-6	1256.53	1.090122	0.179674	-1.14471
-5	1270.95	1.147605	0.237157	-0.90755
-4	1270.67	-0.02203	-0.93248	-1.84003
-3	1279.09	0.662643	-0.24781	-2.08783
-2	1298.5	1.517485	0.607037	-1.4808
-1	1298.86	0.027724	-0.88272	-2.36352
1	1317.45	1.431255	0.520807	-1.84271
2	1362.85	3.446051	2.535603	0.69289
3	1384.98	1.623803	0.713355	1.406245
4	1446.75	4.459992	3.549544	4.955789
5	1504.2	3.970969	3.060522	8.016311
6	1538.12	2.255019	1.344571	9.360882
7	1565.84	1.8022	0.891752	10.25263
8	1572.12	0.401063	-0.50939	9.743249
9	1578.21	0.387375	-0.52307	9.220176
10	1551.06	-1.7203	-2.63075	6.589425
11	1550.88	-0.0116	-0.92205	5.667372
12	1509.43	-2.67268	-3.58312	2.084248
13	1488.59	-1.38065	-2.2911	-0.20685
14	1507.11	1.24413	0.333682	0.126829
15	1518.92	0.783619	-0.12683	0.0000000000000018
Average return		0.910448		

Table 3: Abnormal returns and Cumulative abnormal returns

Days	Share Index	Return	Abnormal return	Cumulative Abnormal return
-15	5234.54	0.36777	0.531113248	0.531113248
-14	5205.06	-0.5633	-0.399952826	0.131160422
-13	5221.96	0.32484	0.48818222	0.619342642
-12	5246.16	0.46326	0.626607461	1.245950103
-11	5266.78	0.39307	0.556408142	1.802358245
-10	5265.15	-0.0308	0.132542642	1.934900887
-9	5269.08	0.07447	0.237816966	2.172717853
-8	5332.03	1.19475	1.358096393	3.530814246
-7	5342.96	0.20511	0.368450019	3.899264265
-6	5339.80	-0.0592	0.104130726	4.003394991
-5	5278.73	-1.1437	-0.980356613	3.023038378
-4	5291.69	0.2456	0.408939954	3.431978333
-3	5287.93	-0.0712	0.09216333	3.524141663
-2	5339.75	0.98007	1.143411466	4.667553129
-1	5444.83	1.96784	2.131186888	6.798740017
1	5167.18	-5.0994	-4.936017445	1.862722572
2	5133.48	-0.6522	-0.488827413	1.373895159
3	5015.50	-2.2983	-2.134936102	-0.761040943
4	5180.14	3.28261	3.445947787	2.684906844
5	5419.93	4.6291	4.792444112	7.477350956
6	5338.77	-1.4974	-1.334084263	6.143266694
7	5341.82	0.05712	0.22046134	6.363728033
8	5335.23	-0.1234	0.03992139	6.403649424
9	5207.16	-2.4004	-2.237072917	4.166576507
10	5124.45	-1.5885	-1.425121921	2.741454586
11	5206.15	1.59443	1.757773151	4.499227737
12	5111.74	-1.8134	-1.650062169	2.849165568
13	5098.48	-0.2594	-0.096075893	2.753089675
14	5063.44	-0.6873	-0.523915928	2.229173747
15	4942.30	-2.3925	-2.229173747	0.000000000
Average return		-0.1633		

Table 4: Abnormal returns and Cumulative abnormal returns

Days	Share Index	Return	Abnormal return	Cumulative Abnormal return
-15	4611.03	0.49276	0.382910298	0.382910298
-14	4633.48	0.48688	0.377024118	0.759934416
-13	4648.09	0.31531	0.205461844	0.96539626
-12	4637.54	-0.227	-0.336826867	0.628569392
-11	4614.75	-0.4914	-0.601276249	0.027293143
-10	4573.88	-0.8856	-0.995490358	-0.968197215
-9	4551.06	-0.4989	-0.60877187	-1.576969086
-8	4502.75	-1.0615	-1.171362861	-2.748331947
-7	4505.59	0.06307	-0.04677935	-2.795111296
-6	4477.89	-0.6148	-0.724643764	-3.51975506
-5	4463.65	-0.318	-0.427858835	-3.947613895
-4	4469.19	0.12411	0.014261757	-3.933352137
-3	4513.55	0.99257	0.882721682	-3.050630455
-2	4518.59	0.11166	0.001811852	-3.048818604
-1	4510.47	-0.1797	-0.289553992	-3.338372595
1	4533.82	0.51768	0.407832494	-2.930540102
2	4546.83	0.28695	0.177102572	-2.753437529
3	4585.07	0.84103	0.731173589	-2.02226394
4	4658.64	1.60456	1.494703739	-0.527560201
5	4796.33	2.95558	2.845731687	2.318171487
6	4985.91	3.95261	3.842753513	6.160925
7	4911.45	-1.4934	-1.603260341	4.557664659
8	4831.85	-1.6207	-1.73055456	2.827110099
9	4774.12	-1.1948	-1.304632383	1.522477715
10	4727.04	-0.9862	-1.096002244	0.426475472
11	4721.23	-0.1229	-0.232761813	0.193713658
12	4719.05	-0.0462	-0.156026324	0.037687334
13	4708.56	-0.2223	-0.33214242	-0.294455086
14	4713.6	0.10704	-0.002812822	-0.297267907
15	4732.79	0.40712	0.297267907	0.00000000000000089
Average Return		0.10985		